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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Thierry Lucidarme

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7590

04/19/2005

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EXAMINER

AHN, SAM K

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,187

Applicant(s)

LUCIDARME ET AL.

Examiner

Sam K. Ahn

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment, received on 01/06/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see p.11, filed 01/06/05, with respect to the rejection(s) of claim(s) 1,2,8,10,11 and 17 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Zhou et al. USP 6,539,009 B1 (Zhou) and Okawa et al. USP 6,842,422 B2 (Okawa).

Claim Objections

2. Claims 4-7 and 10-18 are objected to because of the following informalities:

In claim 4, line 1, delete "cases" and insert "case".

In claim 10, line 8, delete "this base station" and insert "the at least one base station".

In claim 11, line 3, delete "base station" and insert "the at least one base station".

In claim 14, line 7, delete "(16)".

Claims 5-7,12 and 15-18 directly or indirectly depend on claim 4 or 10.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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3. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 10 and 19, lines 6, 9 and 10, respectively, recite "at least partially dispense with the macrodiversity mode", which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 10 and 19, lines 6, 9 and 10, respectively, recite "at least partially dispense with the macrodiversity mode". It is unclear and indefinite as to what is meant by, and what is necessarily performed in order to *partially dispense with the macrodiversity mode*. What is the difference between "Macrodiversity mode" and "partially dispensed macrodiversity mode"?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al. USP 6,539,009 B1 (Zhou) in view of Okawa et al. USP 6,842,422 B2 (Okawa).

Regarding claims 1 and 10, Zhou teaches a method and a control equipment for radio communication between a mobile station and a cellular-network infrastructure including a set of base stations, wherein the mobile station includes at least two receiving units for processing (see Fig.6), in macrodiversity mode, respective radio signals sent out by at least two separate base stations of said set of base stations and carrying identical information (note col.4, lines 49-57). Zhou further teaches wherein the macrodiversity mode (soft-handover) is dispensed when specified conditions are fulfilled (determined by the peak level, at step S16, one base station is selected, note col.7, lines 17-36).

Although one skilled in the art would attempt to design a system to support transferring high data rate when needed, Zhou does not explicitly teach wherein one or more base stations of said set of base stations is or are controlled to send to the mobile station at least two radio signals carrying different sets of

information, and the mobile station is controlled to have its receiving units process these radio signals so as to receive said different sets of information. Okawa teaches one or more base stations of said set of base stations is or are controlled to send to the mobile station at least two radio signals (code channel 1 ~ code channel N, see Fig.5) carrying different sets of information, and the mobile station is controlled to have its receiving units (rake receiver) process these radio signals so as to receive said different sets of information (see CH-1 ~ CH-N in Fig.6). Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Zhou's system to incorporate the feature taught by Okawa of transmitting at least two radio signals carrying different sets of information after dispensing macrodiversity mode for the purpose of supporting high data rate transfer, as taught by Okawa (note col.2, lines 50-54).

Regarding claims 2 and 11, Zhou in view of Okawa teach all subject matter claimed, as applied to claim 1 or 10. Okawa further teaches wherein, said radio carrying said different set of information are sent out by a single base station (see Fig.5).

Regarding claims 3 and 12, Zhou in view of Okawa teach all subject matter claimed, as applied to claim 2 or 11. Okawa further teaches wherein said base station, in the case of the down communication direction, operates with multiple communication channels (CH-1 ~ CH-N) defined by channel-separation codes

being selected with spreading factors (13 in Fig.5) depending on information throughputs required respectively on the channels, with an overall constraint of orthogonality between the codes employed at every instant by the base station (note col.2, line 50 – col.3, line 4).

6. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al. USP 6,539,009 B1 (Zhou) in view of Okawa et al. USP 6,842,422 B2 (Okawa) and Frodigh (cited previously).

Regarding claims 8 and 17, Zhou in view of Okawa teach all subject matter claimed, as applied to claim 1 or 10. Okawa further teaches wherein, said radio carrying said different set of information are sent out by a single base station (see Fig.5), however, does not explicitly teach wherein said different set of information are sent out by at least first and second separate base stations of said set of base stations.

Frodigh discloses wherein a mobile station is communicating with at least first and second separate base stations of a set of base stations (see Fig.1). Thus, it would have been obvious to one skilled in the art at the time of the invention to analyze that a mobile station is capable of receiving one information while communication with a first base station while the second base station might be sending a different set of information, such as in a case where another caller is placed on hold. The motivation to combine would be to increase the feature of

the system having the function of placing another caller on hold while communicating with a first caller.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kumar et al. USP 6,507,568 B2 teach a rake receiver capable of disabling a combiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn
4/15/05

EMESGHEN GHEBRETISSAE
PRIMARY EXAMINER